

Amendments to the Claims

This listing of claims will replace all prior listings of claims in the application.

Listing of Claims

1. (Canceled)

2. (Currently Amended) The fine particle separation treatment system according to Claim 15, wherein the fine particles are electrically separated by charging the electrode rod with the same electric charge as that of the fine particles, and by charging the second electrode ~~of the particle trap box~~ with an electric charge opposed to that of the fine particles.

3. (Currently Amended) The fine particle separation treatment system according to Claim 15, wherein the ~~solution~~fluid circulation ~~passageway~~means further comprises various devices that are operated or work using the solution.

4. (Currently Amended) The fine particle separation treatment system according to Claim 15, wherein the upper end of the electrode rod ~~is elongated~~extends to the ~~lower part~~particle outlet of the cyclone ~~portion~~separator.

5. (Currently Amended) The fine particle separation treatment system according to Claim 4, wherein a conical electrode is provided at the upper end of the electrode rod, and this conical electrode is positioned so as to abut the communication hole.

6. (Currently Amended) The fine particle separation treatment system according to Claim 15, wherein

the cyclone ~~portion~~separator comprises a cylinder part positioned at ~~the an~~ upper part of ~~the cyclone portion~~thereof and a downwardly tapered portion connected to the cylinder part, and

the length of the electrode bar is ~~larger~~greater than the diameter of the cylinder part.

7. (Currently Amended) The fine particle separation treatment system according to Claim ~~1~~15, wherein the distance between the electrode of the particle trap box and the electrode rod is ~~larger~~greater than the diameter of the communication hole.

8.-14. (Canceled)

15. (New) A fine particle treatment system comprising:
a storage tank for storing a solution having fine particles contained therein, the storage tank comprising a solution inlet and a solution outlet;

a cyclone separator for separating the fine particles from the solution, the cyclone separator comprising a fluid inlet for accepting the fluid having fine particles from the storage tank solution outlet, a body portion for separating the particles from the solution by centrifugal force, a fluid outlet for discharging the solution from the cyclone separator and a particle outlet for discharging the separated particles from the cyclone separator;

fluid circulation means for introducing the solution having fine particles from the storage tank solution outlet into the cyclone separator fluid inlet and bringing the cyclone separator fluid outlet into fluid communication with the storage tank solution inlet; and

a particle trap box for receiving the separated particles discharged from the cyclone separator particle outlet through a communication hole and attached thereto, the particle trap comprising an electrode rod disposed at the center thereof and

a second electrode for applying a potential therebetween and remove impurity ions by electrophoresis.

16. (New) The fine particle separation treatment system of Claim 15, wherein the fine particles are electrically separated by charging the electrode rod with an electric charge opposed to that of the fine particles and by charging the second electrode with the same electric charge as that of the fine particles.

17. (New) The fine particle separation treatment system of Claim 15, wherein the cyclone separator is made of either an insulating material or a conductive metal.